

Saturn 900 / 945 Series



Saturn 900 / 945 Series

FCC-B Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the measures listed below.



- = Reorient or relocate the receiving antenna.
- = Increase the separation between the equipment and receiver.
- = Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- = Consult the dealer or an experienced radio/television technician for help.

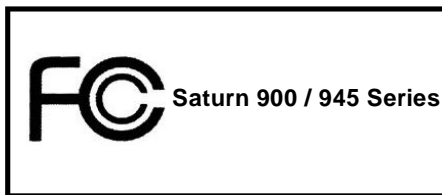
Notice 1

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice 2

Shielded interface cables and A.C. power cord, if any, must be used in order to comply with the emission limits.

VOIR LA NOTICE D'INSTALLATION AVANT DE RACCORDER AU RESEAU.



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Trademark

All trademarks are the properties of their respective owners.
Intel® and Pentium® are registered trademarks of Intel Corporation.
PS/2 and OS®/2 are registered trademarks of International Business Machines Corporation.
Windows® 95/98/2000/NT/XP are registered trademarks of Microsoft Corporation.
Netware® is a registered trademark of Novell, Inc.
Award® is a registered trademark of Phoenix Technologies Ltd.
AMI® is a registered trademark of American Megatrends Inc.

U.S. Patent Numbers

4,631,603; 4,819,098; 4,907,093; 5,315,448; and 6,516,132.

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

Revision History

Revision	Revision History	Date
V1.0	First Release	April 2007



Safety Instructions

1. Always read the safety instructions carefully.
2. Keep this User's Manual for future reference.
3. Keep this equipment away from humidity.
4. Lay this equipment on a reliable flat surface before setting it up.
5. The openings on the enclosure are for air convection hence protects the equipment from overheating. **DO NOT COVER THE OPENINGS.**
6. Make sure the voltage of the power source and adjust properly 110/220V before connecting the equipment to the power inlet. Rating: 110-120V / 220-240V, 8/4.5A, 60/50Hz or 220-240V, 4A, 50Hz.
7. Place the power cord such a way that people can not step on it. Do not place anything over the power cord.
8. Always Unplug the Power Cord before inserting any add-on card or module.
9. All cautions and warnings on the equipment should be noted.
10. Never pour any liquid into the opening that could damage or cause electrical shock.
11. If any of the following situations arises, get the equipment checked by service personnel:
 - The power cord or plug is damaged.
 - Liquid has penetrated into the equipment.
 - The equipment has been exposed to moisture.
 - The equipment does not work well or you can not get it work according to User's Manual.
 - The equipment has dropped and damaged.
 - The equipment has obvious sign of breakage.
12. **DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT UNCONDITIONED, STORAGE TEMPERATURE ABOVE 40°C (102°F), IT MAY DAMAGE THE EQUIPMENT.**



CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.



廢電池請回收

For better environmental protection, waste batteries should be collected separately for recycling or special disposal.

Warning:

1. For every changes in powercord's usage, please use an approved power cord with condition greater or equal to H05VV-F,3G , 0.75mm².
2. Internal part is hazardous moving parts, please keep fingers and other body parts away.
3. For pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible.
4. Do not disable the protective earth pin from the plug, the equipment must be connected to an earthed mains socket-outlet.

1. The optical storage devices are classified as a Class 1 Laser products. Use of controls or adjustments or performance of procedures other than those specified
2. Do not touch the lens inside the drive

WEEE Statement



ENGLISH

To protect the global environment and as an environmentalist, MSI must remind you that...

Under the European Union ("EU") Directive on Waste Electrical and Electronic Equipment, Directive 2002/96/EC, which takes effect on August 13, 2005, products of "electrical and electronic equipment" cannot be discarded as municipal waste anymore and manufacturers of covered electronic equipment will be obligated to take back such products at the end of their useful life. MSI will comply with the product take back requirements at the end of life of MSI-branded products that are sold into the EU. You can return these products to local collection points.

DEUTSCH

Hinweis von MSI zur Erhaltung und Schutz unserer Umwelt

Gemäß der Richtlinie 2002/96/EG über Elektro- und Elektronik-Altgeräte dürfen Elektro- und Elektronik-Altgeräte nicht mehr als kommunale Abfälle entsorgt werden. MSI hat europaweit verschiedene Sammel- und Recyclingunternehmen beauftragt, die in die Europäische Union in Verkehr gebrachten Produkte, am Ende seines Lebenszyklus zurückzunehmen. Bitte entsorgen Sie dieses Produkt zum gegebenen Zeitpunkt ausschliesslich an einer lokalen Altgerätesammelstelle in Ihrer Nähe.

FRANÇAIS

En tant qu'écologiste et afin de protéger l'environnement, MSI tient à rappeler ceci...

Au sujet de la directive européenne (EU) relative aux déchets des équipement électriques et électroniques, directive 2002/96/EC, prenant effet le 13 août 2005, que les produits électriques et électroniques ne peuvent être déposés dans les décharges ou tout simplement mis à la poubelle. Les fabricants de ces équipements seront obligés de récupérer certains produits en fin de vie. MSI prendra en compte cette exigence relative au retour des produits en fin de vie au sein de la communauté européenne. Par conséquent vous pouvez retourner localement ces matériels dans les points de collecte.

РУССКИЙ

Компания MSI предпринимает активные действия по защите окружающей среды, поэтому напоминаем вам, что...

В соответствии с директивой Европейского Союза (ЕС) по предотвращению загрязнения окружающей среды использованным электрическим и электронным оборудованием (директива WEEE 2002/96/EC), вступающей в силу 13 августа 2005 года, изделия, относящиеся к электрическому и электронному оборудованию, не могут рассматриваться как бытовой мусор, поэтому производители вышеперечисленного электронного оборудования обязаны принимать его для переработки по окончании срока службы. MSI обязуется соблюдать требования по приему продукции, проданной под маркой MSI на территории ЕС, в переработку по окончании срока службы. Вы можете вернуть эти изделия в специализированные пункты приема.

ESPAÑOL

MSI como empresa comprometida con la protección del medio ambiente, recomienda:

Bajo la directiva 2002/96/EC de la Unión Europea en materia de desechos y/o equipos electrónicos, con fecha de rigor desde el 13 de agosto de 2005, los productos clasificados como "eléctricos y equipos electrónicos" no pueden ser depositados en los contenedores habituales de su municipio, los fabricantes de equipos electrónicos, están obligados a hacerse cargo de dichos productos al término de su período de vida. MSI estará comprometido con los términos de recogida de sus productos vendidos en la Unión Europea al final de su período de vida. Usted debe depositar estos productos en el punto limpio establecido por el ayuntamiento de su localidad o entregar a una empresa autorizada para la recogida de estos residuos.

NEDERLANDS

Om het milieu te beschermen, wil MSI u eraan herinneren dat....

De richtlijn van de Europese Unie (EU) met betrekking tot Vervuiling van Elektrische en Electronische producten (2002/96/EC), die op 13 Augustus 2005 in zal gaan kunnen niet meer beschouwd worden als vervuiling.

Fabrikanten van dit soort producten worden verplicht om producten retour te nemen aan het eind van hun levenscyclus. MSI zal overeenkomstig de richtlijn handelen voor de producten die de merknaam MSI dragen en verkocht zijn in de EU. Deze goederen kunnen geretourneerd worden op lokale inzamelingspunten.

SRPSKI

Da bi zaštitili prirodnu sredinu, i kao proizvođači koje vodi računa o okolini i prirodnoj sredini, MSI mora da vas podesti da...

Po Direktivi Evropske unije ("EU") o odbačenju električnih i električnih opremi, Direktiva 2002/96/EC, koja stupa na snagu od 13. Avgusta 2005, proizvodi koji spadaju pod "elektronsku i električnu opremu" ne mogu više biti odbačeni kao običan otpad i proizvođači ove opreme biće prinuđeni da uzmu natrag ove proizvode na kraju njihovog uobičajenog veka trajanja. MSI će poštovati zahtev o preuzimanju ovakvih proizvoda kojima je istekao vek trajanja, koji imaju MSI oznaku i koji su prodati u EU. Ove proizvode možete vratiti na lokalnim mestima za prikupljanje.

POLSKI

Aby chronić nasze środowisko naturalne oraz jako firma dbająca o ekologię, MSI przypomina, że...

Zgodnie z Dyrektywą Unii Europejskiej ("UE") dotyczącą odpadów produktów elektrycznych i elektronicznych (Dyrektywa 2002/96/EC), która wchodzi w życie 13 sierpnia 2005, tzw. "produkty oraz wyposażenie elektryczne i elektroniczne" nie mogą być traktowane jako śmieć komunalne, tak więc producenci tych produktów będą zobowiązani do odbierania ich w momencie gdy produkt jest wycofywany z użycia. MSI wypełni wymagania UE, przyjmując produkty (sprzedawane na terenie Unii Europejskiej) wycofywane z użycia. Produkty MSI będzie można zwracać w wyznaczonych punktach zbiorczych.

TÜRKÇE

Çevreci özelliğiyle bilinen MSI dünyada çevreyi korumak için hatırlatır:

Avrupa Birliği (AB) Kararnamesi Elektrik ve Elektronik Malzeme Atığı, 2002/96/EC Kararnamesi altında 13 Ağustos 2005 tarihinden itibaren geçerli olmak üzere, elektrikli ve elektronik malzemeler diğer atıklar gibi çöpe atılamayacak ve bu elektronik cihazların üreticileri, cihazların kullanım süreleri bittikten sonra ürünleri geri toplamakla yükümlü olacaktır. Avrupa Birliği'ne satılan MSI markalı ürünlerin kullanım süreleri bittiğinde MSI ürünlerin geri alınması isteği ile işbirliği içerisinde olacaktır. Ürünlerinizi yerel toplama noktalarına bırakabilirsiniz.

ČESKY

Záleží nám na ochraně životního prostředí - společnost MSI upozorňuje...

Podle směrnice Evropské unie ("EU") o likvidaci elektrických a elektronických výrobků 2002/96/EC platné od 13. srpna 2005 je zakázáno likvidovat "elektrické a elektronické výrobky" v běžném komunálním odpadu a výrobci elektronických výrobků, na které se tato směrnice vztahuje, budou povinni odebírat takové výrobky zpět po skončení jejich životnosti. Společnost MSI splní požadavky na odebírání výrobků značky MSI, prodávaných v zemích EU, po skončení jejich životnosti. Tyto výrobky můžete odevzdat v místních sběrnách.

MAGYAR

Annak érdekében, hogy környezetünket megvédjük, illetve környezetvédként fellépve az MSI emlékezteti Önt, hogy ...

Az Európai Unió („EU”) 2005. augusztus 13-án hatályba lépő, az elektromos és elektronikus berendezések hulladékairól szóló 2002/96/EK irányelve szerint az elektromos és elektronikus berendezések többé nem kezelhetők lakossági hulladékként, és az ilyen elektronikus berendezések gyártói kötelesek válnak az ilyen termékek visszavételére azok hasznos élettartama végén. Az MSI betartja a termékvisszavételre kapcsolatos követelményeket az MSI márkánév alatt az EU-n belül értékesített termékek esetében, azok élettartamának végén. Az ilyen termékeket a legközelebbi gyűjtőhelyre viheti.

ITALIANO

Per proteggere l'ambiente, MSI, da sempre amica della natura, ti ricorda che....

In base alla Direttiva dell'Unione Europea (EU) sullo Smaltimento dei Materiali Elettrici ed Elettronici, Direttiva 2002/96/EC in vigore dal 13 Agosto 2005, prodotti appartenenti alla categoria dei Materiali Elettrici ed Elettronici non possono più essere eliminati come rifiuti municipali: i produttori di detti materiali saranno obbligati a ritirare ogni prodotto alla fine del suo ciclo di vita. MSI si adeguerà a tale Direttiva ritirando tutti i prodotti marchiati MSI che sono stati venduti all'interno dell'Unione Europea alla fine del loro ciclo di vita. È possibile portare i prodotti nel più vicino punto di raccolta.

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Chapter 1

Getting Started

Congratulations for purchasing MSI® Saturn 900 / 945 Series (MS-6469 / MS-6466). MSI® Saturn 900 / 945 Series is your best Mini-Tower PC choice.

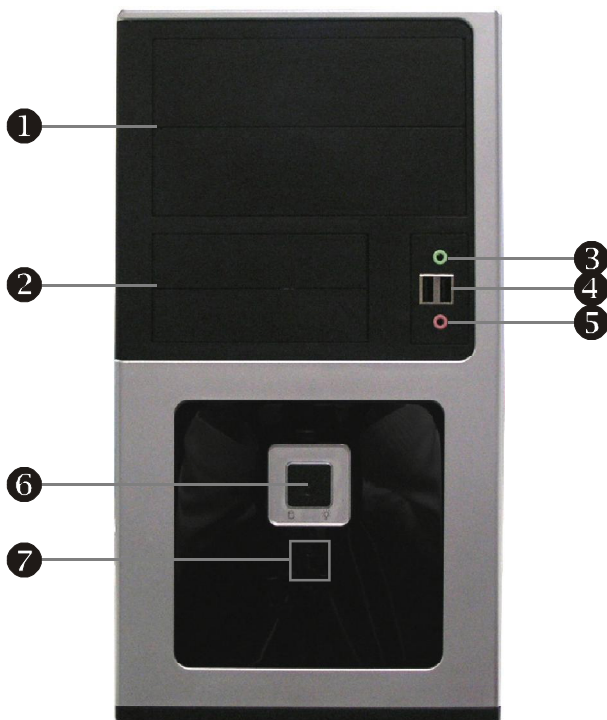
ONLY FOR SERVICE PERSONEL



For more information about the built-in mainboard's specification, please refer to the mainboard manual in the package.

System Configuration

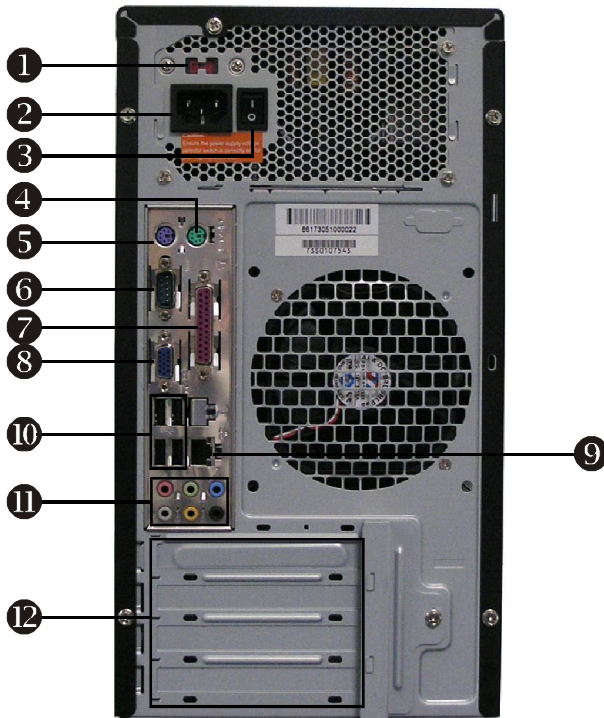
Front View



- | | |
|------------------------------------|-----------------------------|
| 1. 5.25" Driver Bay (for ODD) | 5. Microphone (Pink) |
| 2. 3.5" Driver Bay (for CR or FDD) | 6. Power Button / Power LED |
| 3. Headphone / Speaker (Green) | 7. Reset Button |
| 4. USB 2.0 Ports | |

* This picture is for your reference only and may vary from the different item you installed.

Back View



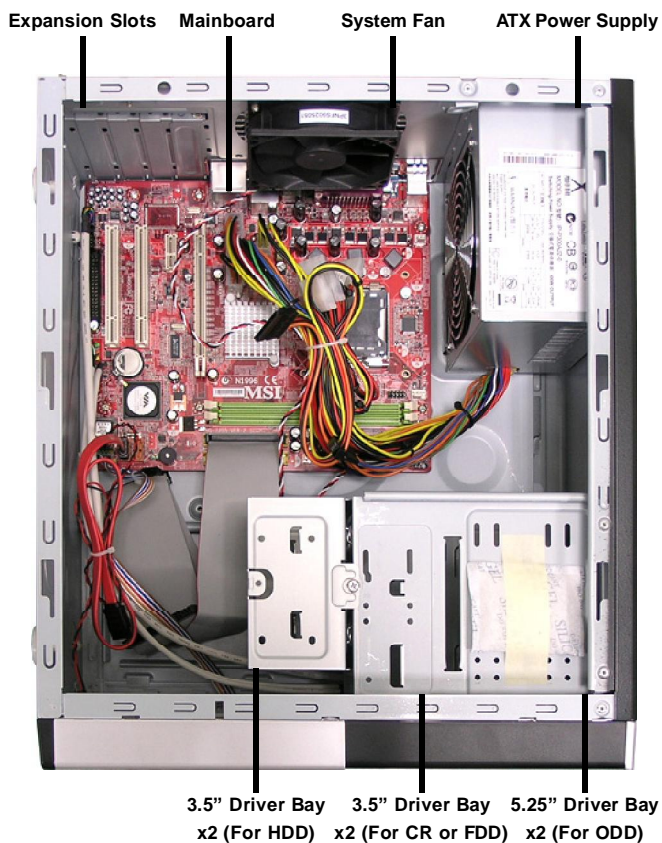
1. Voltage Selector
2. Power Jack
3. Power Switch
4. PS/2 Mouse (Green)
5. PS/2 Keyboard (Purple)
6. Serial Port

7. Parallel Port
8. VGA Port (D-Sub15)
9. LAN Jack (RJ45)
10. USB 2.0 Ports
11. Audio Jacks
12. Expansion Slots

* The Input/Output (I/O) part in this picture is for your reference only and may slightly vary from the different mainboard you purchased.

Internal Placement

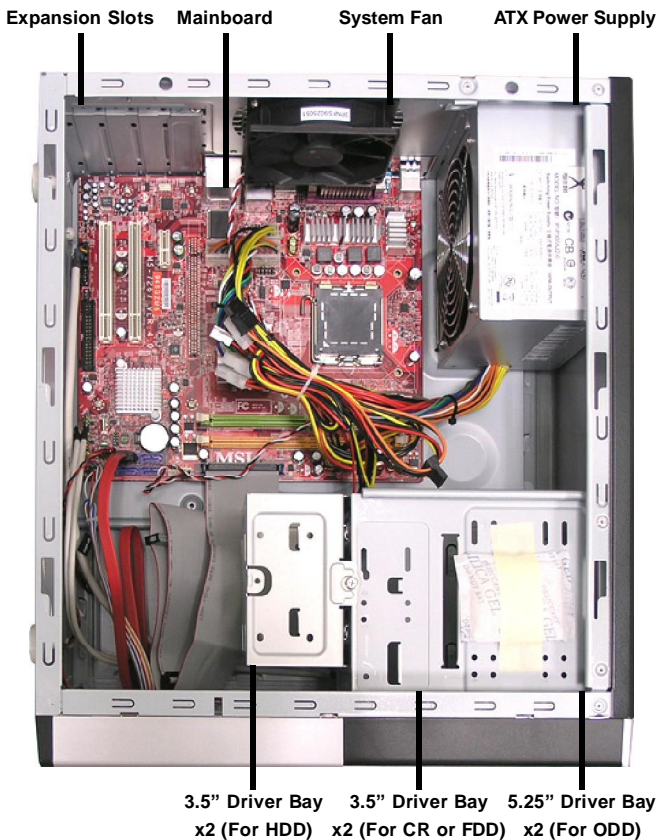
- Dimension: 190mm (W) x 350mm (H) x 380mm (D)
- Minimized screw structure
- Multiple ventilation design
- Detachable bay housing



**MSI® Saturn 900 Series (MS-6469) Mini-Tower PC
with built-in (MS-7255) Micro-ATX Mainboard**

Internal Placement

- Dimension: 190mm (W) x 350mm (H) x 380mm (D)
- Minimized screw structure
- Multiple ventilation design
- Detachable bay housing



**MSI® Saturn 945 Series (MS-6466) Mini-Tower PC
with built-in (MS-7267) Micro-ATX Mainboard**

Chapter 2

System Assembly

This chapter provides you with the information about system assembly procedures. While doing the installation, be careful in holding the components and follow the installation procedures.

Use a grounded wrist strap before handling computer components. Static electricity may damage the components.

ONLY FOR SERVICE PERSONEL



Always unplug the power cord before inserting any add-on card or module.

Overview

The built-in mainboard is designed for MSI® Saturn 900 / 945 Series only. Except the mainboard, the built-in components of the barebone include ATX Power Supply and System Fan. In this chapter, we will show you how to install Optical Disk Drive(ODD), Card Reader(CR), Floppy Disk Drive(FDD), Hard Disk Drive(HDD), PCI Card and PCI-Express Card.

Installation Tools



Cross type screwdriver, can be used to do most of the installation. Choose one with a magnetic head would be better.



Pliers, can be used as an auxiliary tool to connect some connectors or cables.



Forceps, can be used to pick up tiny screws or set up the jumpers.



Rubber gloves, can prevent yourself from being incised and suffering the static charge.

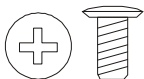
Installation Screws

Three types of screws are used in assembling the barebone:

Screw type 1: Round-headed screw (M3)

Screw type 2: Button-headed screw (6#32)

Screw type 3: Hexagonal screw with washer (6#32)



Screw type 1: Round-headed screw (M3)

This screw is used to lock the ODD, CR or FDD (x16)



Screw type 2: Button-headed screw (6#32)

This screw is used to lock the HDD (x8)



Screw type 3: Hexagonal screw with washer (6#32)

This screw is used to lock the system covers and PCI expansion slots (x9)

Checking the Items

Before assembling the system, please check the items listed below for basic system operation. We highly suggest that the users should install retail box CPU heat sink or standard CPU cooler.

CPU (Optional)



Memory Module (Optional)



Optical Disk Drive (Optional)



Floppy Disk Drive (Optional)



Hard Disk Drive (Optional)



Card Reader (Optional)



PCI Express x16 Card (Optional)



PCI Express x1 Card (Optional)



PCI Card (Optional)



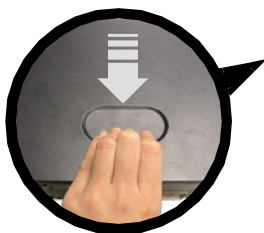
Installation Procedures

Removing Covers

Unlock the two screws (*screw type 3*) on the back panel with a screwdriver.



Pull the cover (right side) forward.



Remove the cover from system.

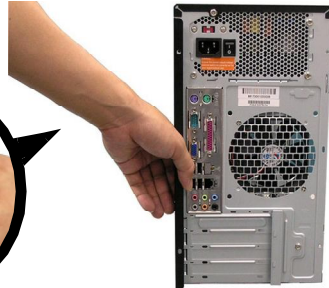
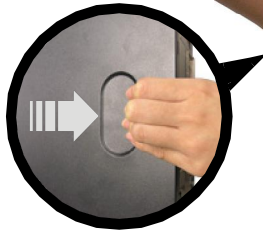


(Continue...)

Again, unlock the two screws (*screw type 3*) on the back panel with a screwdriver.



Pull the cover (left side) forward.

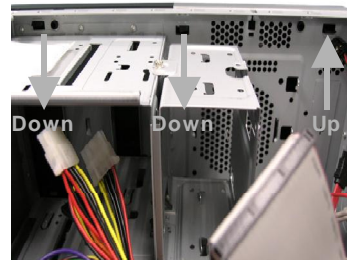


Remove the cover from system.



(Continue...)

Pull these three hooks with the direction shown on the picture to release the front panel.



Remove the front panel from system to release all the driver bays.

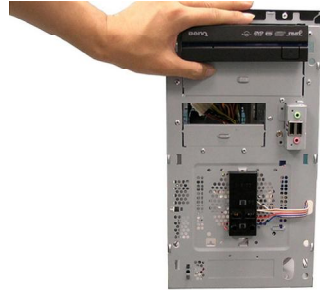


After disassembly.

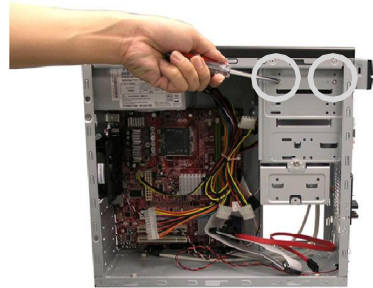


Installing Optical Disk Drive (ODD)

Insert the ODD into the 5.25" driver bay.



Lock the two screws (*screw type 1*) to fix the ODD.



Turn the system to the other side and lock the other two screws (*screw type 1*).



(Continue...)

Connect the cable.

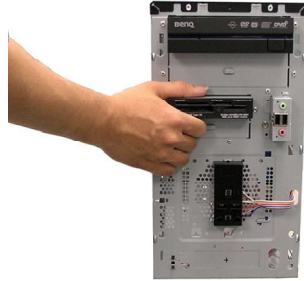


Connect the power cord.



Installing Card Reader (CR) or Floppy Disk Drive (FDD)

Insert the CR or FDD into the 3.5" driver bay.



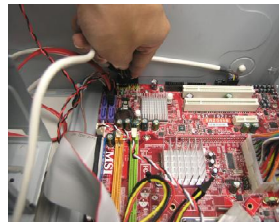
Lock the two screws (*screw type 1*) to fix the CR or FDD.



Turn the system to the other side and lock the other two screws (*screw type 1*).

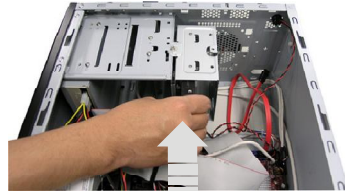


Connect the cable.

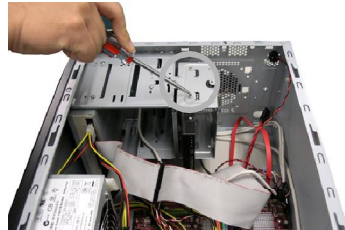


Installing IDE Hard Disk Drive (HDD)

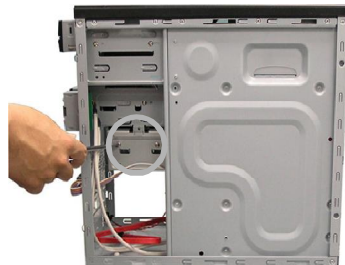
Insert the IDE HDD into the 3.5" driver bay.



Lock the two screws (*screw type 2*) to fix the IDE HDD.



Turn the system to the other side and lock the other two screws (*screw type 2*).

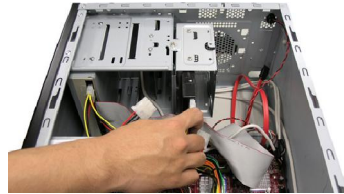


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Connect the cable.

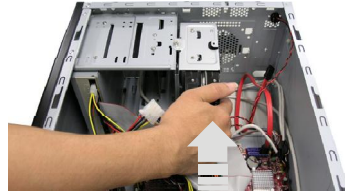


Connect the power cord.



Installing SATA Hard Disk Drive (HDD)

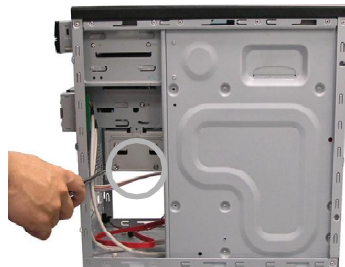
Insert the SATA HDD into the 3.5" driver bay.



Lock the two screws (*screw type 2*) to fix the SATA HDD.



Turn the system to the other side and lock the other two screws (*screw type 2*).



(Continue...)

Connect the cable.

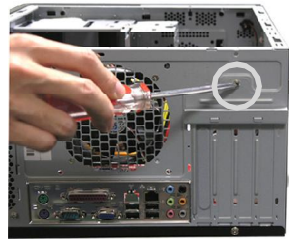


Connect the SATA power cord.



Installing PCI Card

Unlock the screw (*screw type 3*) on the lock bracket with a screwdriver.



Remove the lock bracket from back panel to release all the expansion slots.



Push to remove the metal cover to release the PCI slot.



(Continue...)

Insert the PCI card vertically into the PCI slot.



Lock the screw (*screw type 3*) on the support bracket.



Installing PCI Express Card

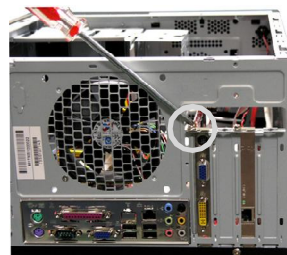
Unlock the screw (*screw type 3*) on the support bracket and remove the metal cover to release the PCI express slot.



Insert the PCI express card vertically into the PCI express slot.



Lock the screw (*screw type 3*) on the support bracket.

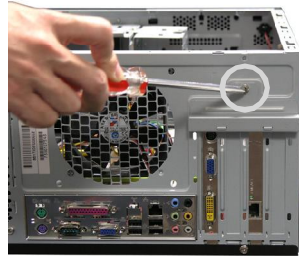


(Continue...)

Restore the lock bracket to back panel to fix all the expansion slots.



Lock the screw (*screw type 3*) on the lock bracket with a screwdriver.



Restoring Covers

Push to remove the plastic cover on the front panel for ODD with fingers carefully.



Push to remove the plastic cover on the front panel for CR or FDD with fingers carefully.



Restore the front panel to system to fix all the driver bays.



(Continue...)

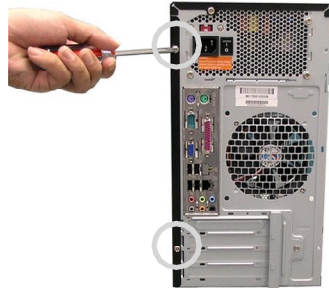
Restore the cover (left side) to system.



Push the cover backward.



Lock the two screws (*screw type 3*) on the back panel with a screwdriver.



(Continue...)

Again, restore the cover (right side) to system.



Push the cover backward.



Lock the two screws (*screw type 3*) on the back panel with a screwdriver.



Complete Installation



* These pictures are for your reference only and may vary from the different item you installed.

